

LISTING OF CLAIMS:

1. (Currently amended) An integrated vehicle control system comprising a plurality of electronic control apparatuses connected via at least one communication line in a first network to communicate with each other for controlling specific functions of a vehicle,

wherein one of said plurality of electronic control apparatuses functions as an overall control apparatus for transmitting operation directives to the other electronic control apparatuses, each functioning as an individual control apparatus, to cause respective individual control apparatuses to operate according to said operation directives, thereby realizing a collective control of said specific functions, and

said overall control apparatus determines said operation directives supplied to said individual control apparatuses based on information obtained via said communication line from said individual control apparatuses, and executes abnormality detection processing for detecting an abnormality occurring in the integrated vehicle control system, and

said overall control apparatus executes gateway processing to select information necessary for a second network from information received via said communication line and to transmit the selected information via a host network to an overall control apparatus of the second network, thereby allowing mutual

exchange of information between individual control apparatuses of differently functionalized networks.

2. (Currently amended) The integrated vehicle control system in accordance with claim 1, wherein

said overall control apparatus obtains condition data from said individual control apparatuses, said condition data representing operating conditions of control objective devices controlled based on said operation directives by said individual control apparatuses, and

said overall control apparatus executes said abnormality detection processing by detecting the abnormality based on said obtained condition data and identifying an abnormal portion.

3. (Canceled)

4. (Currently amended) An integrated vehicle control system comprising a plurality of networks connecting a plurality of electronic control apparatuses via a plurality of communication lines to communicate with each other, each network being provided for one ~~or~~ of a plurality of functions of a vehicle,

wherein one electronic control apparatus connected to each of said plurality of communication lines of said plurality of networks is a vehicle overall control

apparatus for transmitting operation directives to other electronic control apparatuses, each functioning as an individual control apparatus of said each network, to cause respective individual control apparatuses to operate according to said operation directives, thereby realizing a collective control of said functions of said each network,

said vehicle overall control apparatus determines said operation directives supplied to said individual control apparatuses based on information obtained via said communication lines from said individual control apparatuses, and executes abnormality detection processing for detecting an abnormality occurring in the integrated vehicle control system, and

said vehicle overall control apparatus executes gateway processing by selecting information necessary for other network from information received via said communication lines and transmitting the selected information via a communication line of a corresponding network, thereby allowing mutual exchange of information between individual control apparatuses of different networks.

5. (Currently amended) The integrated vehicle control system in accordance with claim 4, wherein

said vehicle overall control apparatus obtains condition data from said individual control apparatuses, said condition data representing operating

conditions of control objective devices controlled based on said operation directives by said individual control apparatuses, and

said vehicle overall control apparatus executes said abnormality detection processing by detecting the abnormality based on said obtained condition data and identifying an abnormal portion.

6. (New) The integrated vehicle control system in accordance with claim 1, wherein said first network and said second network are different ones of a power train network, a vehicle motion network and a power source network.

7. (New) The integrated vehicle control system in accordance with claim 1, wherein said overall control apparatus arbitrates requests received from the first network and the second network.

8. (New) The integrated vehicle control system in accordance with claim 1, wherein said other electronic control apparatuses each controls a respective corresponding objective device to attain the operation directives.

9. (New) The integrated vehicle control system in accordance with claim 1, wherein the overall control apparatus of the second network determines the

abnormality has occurred in one of the plurality of electronic control apparatuses in the second network.

10. (New) The integrated vehicle control system in accordance with claim 1, wherein information representative of the abnormality if in the first network is stored in the overall control apparatus of the first network, and information representative of the abnormality if in the second network is stored in the overall control apparatus of the second network.

11. (New) The integrated vehicle control system in accordance with claim 4, wherein each network of said plurality of networks are different ones of a power train network, a vehicle motion network and a power source network.

12. (New) The integrated vehicle control system in accordance with claim 4, wherein said vehicle overall control apparatus arbitrates requests received from the plurality of networks.

13. (New) The integrated vehicle control system in accordance with claim 4, wherein said other electronic control apparatuses each controls a respective corresponding objective device to attain the operation directives.

14. (New) The integrated vehicle control system in accordance with claim 4, wherein information representative of the abnormality is stored in the vehicle overall control apparatus.